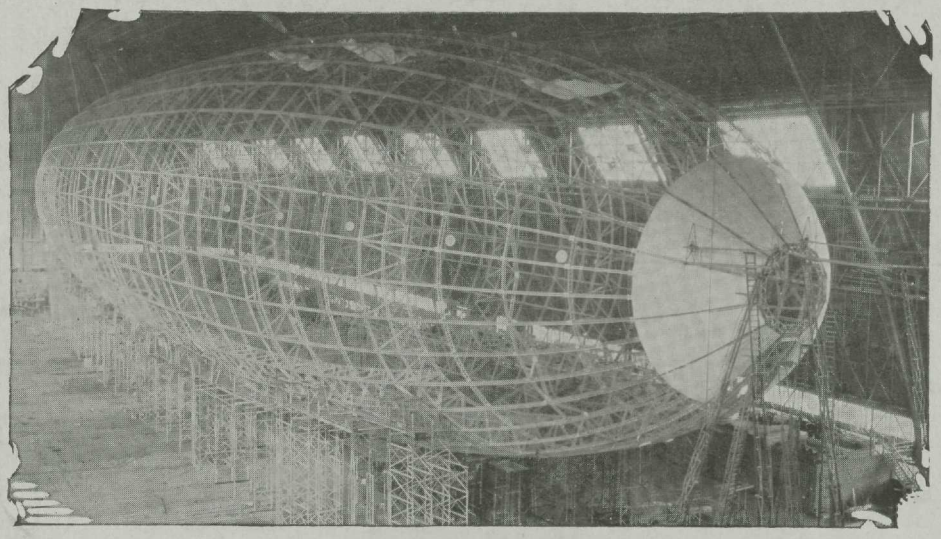
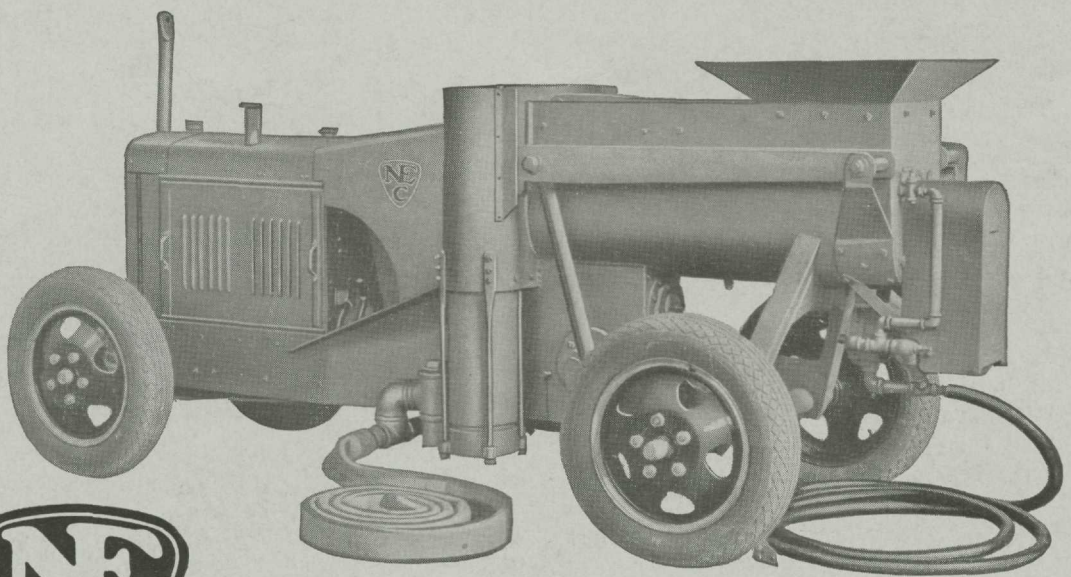
The Ohio State Engineer

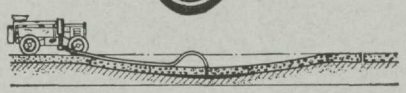


MAY 1932

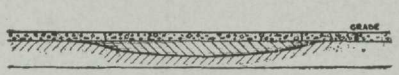
MEMBER OF ENGINEERING COLLEGE MAGAZINES ASSOCIATED

MUD-JACK CORRECTS SETTLED PAVEMENTS





The principle of operation of the Mud-Jack is based upon the well known law of hydrostatics that "pressure is exerted with equal intensity in all directions". It is the same principle which is applied in the operation of hydraulic elevators or pneumatic lifts. A pressure of 1 lb. per sq. in. exerted by the machine is more than sufficient to raise the pavement. Higher pressures are sometimes necessary first to pry the slab loose from the subgrade.



A SPECIAL combination mixer and pump, the Mud-Jack, has been developed by National Equipment Corporation for correcting settlements in rigid types of pavements. It mixes earth and water, with sufficient cement to take up the shrinkage, and then forces the mixture through holes drilled in the slab.

Without detouring traffic, the portable Mud-Jack brings the slab back to the original grade at a very small cost. Dips from 1″ to 18″ deep are corrected with equal ease—and future settlements can be corrected even more economically.

The actual operation of the machine begins with a mixing action in the tank which contains a number of revolving paddles. A mobile mixture of soil, cement and water flows into two large cylinders, one at each side of the machine. Pistons then force the mud from these cylinders through a 2½ inch hose into holes drilled through the concrete slab.

The Mud-Jack, one of the many products built by National Equipment Corporation, reflects the continued progress of N. E. C. in highway machinery and N. E. C. leadership in engineering development.

National Equipment Corporation

N. 30th St. & W. Concordia Ave.,
Milwaukee, Wisconsin

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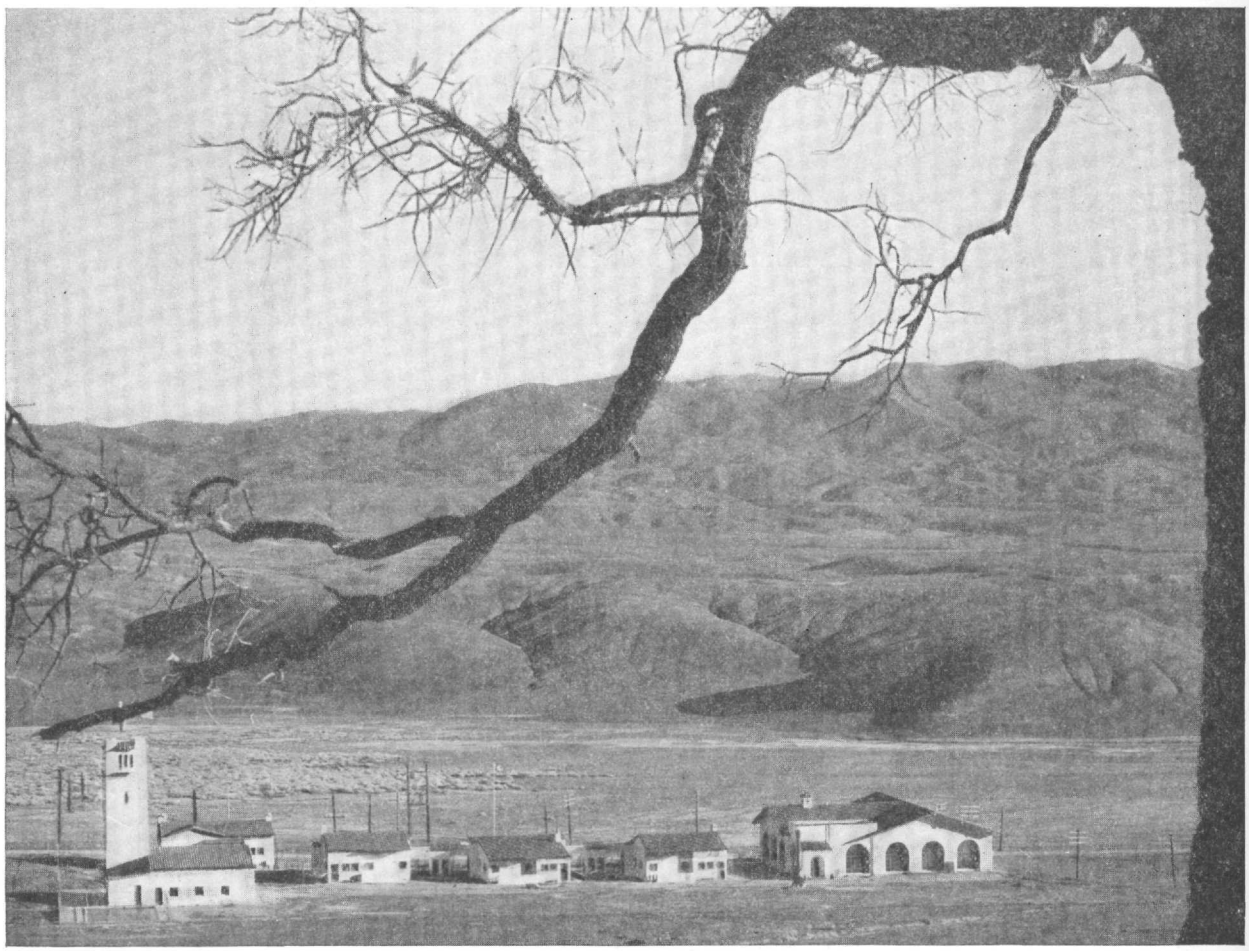

Courtesy of Electrical Engineering

TELEPHONE REPEATER STATION ON THE LOS ANGELES-SAN FRANCISCO TOLL CABLE